

## NOTES ON MISSOURI PLANTS

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ALL specimens representing the plants discussed below may be found in the Herbarium of the Field Museum of Natural History.

*SCIRPUS TORREYI* Olney. Represented by *Steyermark 27146*, around deep part of margin of upland sink-hole pond along highway 32, sect. 6, 1¼ mi. north of Lynchburg, Laclede Co., June 23, 1939.

This adds another to the list of relic plants from the northern and northeastern parts of the United States isolated in and around these upland sink-hole ponds. Besides this species, *Najas gracillima* (A. Br.) Morong, *Glyceria acutiflora* Torr., and *Carex decomposita* Muhl. are restricted in Missouri to such ponds. The slender weak rootstock, obtusely 3-angled culms, nodulose leaves fibrillose at base, blunt involucre leaf, oblong or spindle-shaped spikelets, smooth barely mucronate scales, and 3-cleft styles distinguish this species easily from *S. americanus*.

*SCIRPUS HETEROCHAETUS* Chase. The following collections, determined by Mr. Allan A. Beetle who is monographing this group of species, are from Missouri: *George Moore*, Wire Road, Laclede Co., July 12, 1937; *Steyermark 23292*, margin of upland pond, 3½ mi. south of Licking, Texas Co., July 15, 1937.

*CAREX MICRODONTA* Torr. & Hook. Previously known from wet prairies in Kansas, Oklahoma, Mississippi, and Texas, this species was recently collected by the writer in Missouri: *Steyermark 27682*, limestone glade on top of southwest-facing bluffs along Big Maries River, T 42 N, R 10 W, sect. 24 and 25, 5 mi. northwest of Freeburg, Osage Co., July 1, 1939. This specimen has been determined by Dr. F. J. Hermann.

*CAREX SUBIMPRESSA* Clokey, *RHODORA* **21**: 84. 1919. The type of this species was collected in Macon Co., Illinois; it has also been found in Indiana. This is its first known record from Missouri: *Steyermark 26489*, in swamp in alluvial bottoms of Mississippi River along highway 61, 2 mi. north of Canton, Lewis Co., May 14, 1939. This collection has been determined by Dr. F. J. Hermann.

This species, which is considered a hybrid between *Carex lanuginosa* and *Carex hyalinolepis*, was growing in dense colonies with one of its parent species, *C. lanuginosa* (*Steyermark 26490*) and with *C. vesicaria* (*Steyermark 26489a*). Although no collections of the other supposed parent (*C. hyalinolepis*) were

taken from this area, it probably occurs in the near vicinity. The hybrid plants had creeping rootstocks, grass-green leaves with glabrous sheaths, hairy perigynia, and prominent teeth of the perigynium-beak. The plants in general were more robust than *C. lanuginosa* but less so than *C. hyalinolepis* or *C. vesicaria*.

CAREX VIRESCENS Muhl. In the "Annotated Catalogue of the Flowering Plants of Missouri" by E. J. Palmer and the writer *Carex virescens* Muhl. was recorded from Scott, Dunklin, Butler, and Ripley counties. These records refer and should be transferred, however, to what is now called *Carex Swanii* (Fern.) Mack., in Bull. Torr. Bot. Club **37**: 246. 1910 and N. Am. Fl. **18**<sup>6</sup>: 321. 1935, and based upon *Carex virescens* var. *Swanii* Fern., since all the collections mentioned in these counties have the subglobose to thick-cylindric spikes 3–5 mm. thick and with less strongly ribbed perigynia characteristic of *Carex Swanii*.

In Mackenzie's treatment of *Carex* in N. Am. Fl. **18**<sup>6</sup>: 321–322. 1935, *Carex virescens* Muhl. is shown as occurring west to Indiana, Ohio, Kentucky, and Tennessee. A recent collection by the writer from Missouri, and verified by Dr. F. J. Hermann, shows that its range extends west of the Mississippi River. This Missouri collection is represented by *Steyermark 27161*, shaded north-facing sandstone ledges along Jack's Fork of Current River, from  $\frac{1}{2}$  mile of Shannon Co. line to near Shannon Co. line, T 28 N, sect. 36,  $5\frac{1}{2}$  mi. southeast of Arroll, Texas Co., June 23, 1939. This collection has the linear-cylindric spikes, costate perigynia, and other characters of typical *C. virescens*, a species of the more northern and northeastern parts of the United States.

TRADESCANTIA THARPII Anderson & Woodson  $\times$  T. CANALICULATA Raf. This hybrid has not previously been noted, either by the writer or in Anderson and Woodson's studies of *Tradescantia*. It is represented from Missouri by the following collection: *Steyermark 22224*, limestone glade along Johnson Creek, T 29 N, R 26 W, sect. 36,  $\frac{1}{2}$ – $2\frac{1}{2}$  mi. southwest of Spencer, 6–7 mi. west of Halltown, Lawrence Co., May 6, 1939.

Both of the parent species occurred on this glade. The plant collected had the glaucous appearance of *T. canaliculata*, but the low stature and pubescence of *T. Tharpii*.

**JUNCUS KANSANUS** Hermann. Originally described from Kansas by Hermann in *Papers Mich. Acad. Sci.* **20**: 41. 1935, it was collected about twenty-five years ago from Pike County, Missouri, by Reverend *John Davis*, and this collection has been its only record from the state. Recently, the writer found this species in the western part of the state nearer the Kansas area, and this collection, verified by Dr. F. J. Hermann, is represented by the following: *Steiermark 27508*, upland sandstone glades, T 36 N, R 26 W, sect. 36, 2 mi. southwest of Birdsong, St. Clair Co., June 27, 1939.

The short congested inflorescence, the ascending perianth-segments, completely 3-celled capsules, bract longer than the inflorescence, and the firm membranaceous auricles which are slightly produced, distinctly mark this species.

**SISYRINCHIUM CAMPESTRE** Bicknell, forma **kansanum** (Bicknell), comb. nov.—*S. campestre* Bicknell, var. *kansanum* Bicknell, *Bull. Torr. Bot. Club* **26**: 344. 1899.

The white-flowered *Sisyrinchium campestre* var. *kansanum* Bicknell appears to have no differentiating characters other than corolla-color and seems best treated as a form.

**SISYRINCHIUM CAMPESTRE** Bicknell, forma **flaviflorum** (Bicknell), comb. nov.—*S. flaviflorum* Bicknell, *Bull. Torr. Bot. Club* **26**: 345. 1899.

This yellow-flowered variation also may be considered as worthy only of formal status.

On page 92 of my *Spring Flora of Missouri*, both of the above combinations were given by mistake, but due to an oversight by the printer, the writer, away on an extended trip, did not have the opportunity of correcting the error in time. In order that these combinations may have a legitimate status, they are given above in their desired form with complete bibliographical data.

**POPULUS DELTOIDES** Marsh., f. **pilosa** (Sarg.) Palmer & Steyermark, comb. nov. *P. balsamifera* var. *pilosa* Sarg. *Journ. Arnold Arb.* **1**: 63. 1919. *P. deltoides pilosa* (Sarg.) Sudw. *Check List Forest Trees U. S.* **65**. 1927. This rare hairy-leaved form has been, until recently, collected in Missouri but once, that in Dunklin County. Recently, the writer collected it in the Ozark region, at the second station known in the state, as represented by the following collection: *Steiermark 26530*, in back of gravel bar along Middle Fork of Black River, just west of Lesterville, Reynolds Co., May 21, 1939.

This collection has the petioles as well as the leaf-surface hairy.

SILENE STELLATA (L.) Ait. f., var. SCABRELLA (Nieuwl.) Palmer & Steyermark, Ann. Mo. Bot. Gard. 25: 781. 1938.

The writer by an oversight published an unnecessary new combination (RHODORA 42: 99. 1940). This latter combination should be disregarded in favor of the earlier one by Palmer and Steyermark. An earlier distribution set of the Gray Herbarium Card Index attributed the combination *Silene stellata* var. *scabrella* to Nieuwland (Am. Midl. Nat. 3: 58–59. 1913). This combination was cited as such and attributed to Nieuwland in Deam's Flora of Indiana. It is a question, however, whether Nieuwland should be given as the authority of this combination. In Am. Midl. Nat. 3: 58. 1913, Nieuwland actually placed his "var. nov." after *Evactoma stellata* var. *scabrella*, while below this category he simply printed in italics "*Silene stellata* var. *scabrella*"; in other words, Nieuwland considered the latter name a synonym, and expressed his preference for the name *Evactoma stellata* var. *scabrella*, favoring the use of the genus *Evactoma* over *Silene* throughout the paper. But, according to Art. 40 of the International Rules of Nomenclature "A name of a taxonomic group is not validly published when it is merely cited as a synonym". Therefore, it appears that the name *Silene stellata* var. *scabrella* was not properly published by Nieuwland, and that the combination must be attributed to Palmer and Steyermark in their publication in 1938.

EUPHORBIA COROLLATA L., var. ANGUSTIFOLIA Ell. Sk. 2: 659. 1824. This variety, distinguished by its linear to linear-lanceolate leaves, has not been reported previously from Missouri. It is represented by the following collection: *Steyermark 27692*, limestone glade on southwest-facing limestone bluffs along Big Maries River, T 42 R, R 10 W, sect. 24 and 25, 5 mi. northwest of Freeburg, Osage Co., July 1, 1939. Another collection from Missouri, belonging to this variety, is in the Herb. Field Mus.; it is "Valley Park, May 29, 1887, *William Trelease*."

The leaves in this variety average from 3–5 mm. broad and 4–6 cm. long.

ACER NIGRUM Marsh., f. PUBESCENS Deam, Fl. Ind. p. 657. 1940. This form, distinguished by the petioles more or less pubescent their entire length, was reported from Atherton,

Jackson Co., Missouri, by Deam. A second collection, made recently by the writer, is represented by the following: *Steyermark 22148*, base of rich wooded limestone slopes with Roubidoux sandstone above, along Dry Fork of Meramec River, T 38 N, R 6 W, sect. 33, 4 mi. southeast of St. James, Phelps Co., May 5, 1939.

*ELATINE TRIANDRA* Schkuhr, var. *AMERICANA* (Pursh) Fassett. This species has been collected in Missouri in Jackson County (*Bush 131*, 1898), but since that date had never been found in the state. Recently, the writer discovered a second station bordering a sink-hole pond; it is represented by the following collection: *Steyermark 27219*, upland sink-hole pond along highway 5, 7 mi. north of Lebanon, Laclede Co., June 24, 1939.

This pond was at one time, according to the inhabitants in the area, much deeper and contained more water than at present, but, due to the growth and increase of *Nelumbo pentapetala* and *Ludwigia palustris* var. *americana*, it has been filling up gradually. The *Elatine* was rooting on the muddy margin of a raised muddy island in the pond. It is another one of the rare relic species isolated in Missouri around such ponds.

*ROOTALA RAMOSIOR* (L.) Koehne, var. *TYPICA* Fern. & Griscom, *RHODORA* **37**: 169. 1935. The typical variety, distinguished by its generally smaller parts throughout, the plant rarely 2 dm. tall, the leaves 1.5–5 mm. broad, longer-petioled than the var. *interior* Fern. & Griscom, with subulate bractlets 0.5–1.4 mm. long, and smaller fruits (2–3.3 mm. broad and 2–4 mm. long), has a distribution along the coastal plain from Mass. to Fla. and Tex., the sands of southern Michigan, northern Indiana, Illinois, and Minnesota, and also Washington and Oregon. It has not been known from Missouri previously. Throughout the range of the species in Missouri var. *typica* is usually replaced by the larger and coarser *Rotala ramosior* var. *interior*. The writer found recently, however, around one of these upland sink-hole ponds, where so many other relic species of the northern and eastern United States are isolated, a colony that should be referred to *Rotala ramosior* var. *typica*, agreeing with it in all critical details. This is a range extension of several hundred miles for this variety. It is represented by the following collection from Missouri: *Steyermark 27136*, bordering upland sink-hole pond along highway 32, sect. 8, 0.7 mi. east of Lynchburg, Laclede Co., June 23, 1939.

*OSMORHIZA LONGISTYLIS* (Torr.) DC., var. *BRACHYCOMA* Blake, *RHODORA* **25**: 110. 1923. This variety, distinguished from *O. longistylis* var. *villicaulis* Fern. by its prevailing puberulence of much shorter hairs at most 0.5 mm. long instead of long villous

pubescence of hairs 1–2 mm. long, has not been known previously from Missouri. It is represented by the following collection: *Steyermark 22179*, upper part of wooded limestone bluffs with Roubidoux sandstone above, along Dry Fork of Meramec River, T 38 N, R 6 W, sect. 33, 4 mi. southeast of St. James, Phelps Co., May 5, 1939.

PENSTEMON DIGITALIS (Sweet) Nutt., forma **Baueri**, f. nov., a typo recedit foliis ternatis.—Wooded southwest-facing limestone bluffs along Maries River, T 43 N, R 10 W, sect. 18, 3 mi. northeast of Westphalia, Osage Co., Missouri, July 1, 1939, *Julian A. Steyermark 27665*, TYPE, in Herb. Field Mus.).

This form, distinguished by its leaves occurring in whorls of threes, is named in honor of my friend, Mr. Bill Bauer, of Webster Groves, Missouri, who accompanied me on this trip and who is an enthusiastic and keen collector.

RUDBECKIA HIRTA L., f. FLAVESCENS Clute, Am. Bot. **21**: 56. 1915. This form, distinguished from typical *Rudbeckia hirta* by its pale yellow rays, has not been previously reported from Missouri. It was originally described from an Illinois plant. In Missouri it is represented by the following collection: *Steyermark 27149*, dry upper cherty slopes along Jack's Fork of Current River, from  $\frac{1}{2}$  mi. of Shannon Co. line to near Shannon Co. line, T 28 N, R 7 W, sect. 36,  $5\frac{1}{2}$  mi. southeast of Arroll, Texas Co., June 23, 1939.

The plant was growing with typical *R. hirta* (*Steyermark 27150*).

CHRYSANTHEMUM BALSAMITA L., var. TANACETOIDES Boiss. This species, previously unreported from Missouri, has been collected by Mr. *Oscar Petersen*, escaped from a garden, and established along a fence row, in Franklin Co., during 1940.

HYPOCHAERIS RADICATA L. This species has likewise not been reported previously from Missouri. It is represented from the state by the following collection: *Oscar Petersen*, lawn, Jewish Hospital, St. Louis, St. Louis Co., June 25, 1940.

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